CLAIMS

1. System for consulting and/or updating a record stored in a first database (33, 36), the said record comprising one or a plurality of resource records (RR), the said first database being stored by a domain name server, referred to as a DNS server, or a directory server, referred to as an LDAP server, able to be accessed by indirection from a DNS server, characterised in that it comprises:

- communication means (1150, 53-59, 61, 63) enabling the said system to receive from a telecommunication terminal a request for consultation and/or modification of the said record or a programming of such a request;

- control means (1175, 74, 75) adapted to determine, from said consultation and/or modification request transmitted to the said system or previously programmed in the said system, a domain name and an operation to be performed on the said record;

- protocol management means (1162, 62, 64) adapted to seek, from the said domain name, the IP address of the said server storing the said first database and, according to the said operation, to transmit to the said server a request to read or update the said record.

2. System according to Claim 1, characterised in that it comprises authentication means (1173, 73) adapted to authenticate at the application level the sender of the said request from authentication information stored in a second local or remote database (1170, 70).

3. System according to Claim 2, characterised in that, the sender of the said request having been authenticated, the said protocol management means are adapted to transmit a consultation request according to the DNS protocol (DNS Query) to the said DNS server, the request having as its argument the said domain name, and to receive a first response from the said server.

4. System according to Claim 3, characterised in that, the first database being stored by the said DNS server, the control means are adapted to extract from the said first response information contained in the said record and to format it in order to transmit it to the said terminal via the said communication means.

5. System according to Claim 3, characterised in that, the first database being stored by the said LDAP server, the control means are adapted to extract the address of the LDAP server from the said first response.

6. System according to Claim 5, characterised in that the said protocol management means are adapted to transmit a consultation request according to the LDAP protocol (LDAP Search) to the said LDAP server and to receive from this a second response.

7. System according to Claim 6, characterised in that the control means are adapted to extract from the said second response information contained in the said record and to format it in order to transmit it to the said terminal via the said communication means.

8. System according to Claim 4, characterised in that, the control means having determined an updating operation, the protocol management means are adapted, on instruction from the said control means, to transmit an update request according to the DNS protocol (DNS Update).

9. System according to Claim 8, characterised in that the protocol management means are adapted to receive an updating confirmation/invalidation response from the DNS server and the control means are adapted to format this confirmation/invalidation response before ordering its transmission to the said terminal via the said communication means.

10. System according to Claim 7, the control means having determined an updating operation, the protocol management means are adapted, on instruction from the said control means, to transmit an updating request according to the LDAP protocol (LDAP Modify).

11. System according to Claim 10, characterised in that the protocol management means are adapted to receive an updating confirmation/invalidation response from the LDAP server and the control means are adapted to format this confirmation/invalidation response before ordering the transmission thereof to the said terminal via the said communication means.

12. System according to Claim 2, characterised in that the control means are adapted to store in the second database a configuration profile transmitted via the said communication means, the said profile consisting of one or more programmed modification requests, each programmed modification request being associated with at least one time range and/or one geographical area.

13. System according to Claim 12, characterised in that the said control means comprise a configuration automatic controller (74) adapted to scrutinise the said second database and to test whether a measurement of time belongs to the said range and/or a location of the terminal belongs to the said area, and, in the case of a positive result, to extract the associated programmed modification request and to transmit to the said protocol management means a request to consult the first database.

14. System according to Claim 13, characterised in that the said protocol management means are adapted to formulate the said consultation request according to the DNS protocol (DNS Query) or LDAP protocol (LDAP Search) and to receive, from the server storing the database, the content of the said record.

15. System according to Claim 14, characterised in that, if the content of the said record is not in accordance with the said programmed modification request, the said control means determine an operation to be performed on the said record in order to make it conform to the said programmed modification request and the said protocol management means formulate, according to the said operation, a request for updating the said first database according to the DNS or LDAP protocol and routing to the server storing the said first database.

16. System according to Claim 15, characterised in that the said protocol management means are adapted to receive an updating confirmation/invalidation response from the server storing the first database and in that the control means are adapted to detect the said confirmation/invalidation response and to store it in history form in the second database.

17. System according to Claim 16, characterised in that the said control means are adapted to receive a request to read the said history, and, after authentication of the sender of

the said request via the said authentication means, to transmit to him the content of the said history via the said communication means.

18. System according to Claim 17, characterised in that the said protocol management means are adapted to receive an updating confirmation/invalidation response from the server storing the first database and in that the control means are adapted to detect the said confirmation/invalidation response and to transmit a report on the said operation to a notification terminal.

19. System according to one of the preceding claims, characterised in that the said protocol management means are adapted to use a DNS protocol of the secure type (DNSSec).

20. System according to one of the preceding claims, characterised in that it comprises an STN (Switched Telephone Network) and/or ISDN (Integrated Service Digital Network) interface (51) connecting the said communication means to the STN/ISDN network.

21. System according to Claim 20, characterised in that the said communication means comprise a voice synthesis module (55) or a voice file reproduction module (56) making it possible to generate a voice menu and to reproduce one or more items of information on the said recorded voice form, and a recognition module (54) for DTMF (Dual-Tone Multi-Frequency) signals and/or a voice recognition module for recognising a choice in the said voice menu.

22. System according to Claim 20, characterised in that the said communication means comprise a videotex server (57) making it possible to manage a menu, to enter a request for consultation or modification of the said record and to reproduce one or more items of information about the said record or an update confirmation/invalidation response in the form of videotex sequences.

23. System according to Claim 20, characterised in that the said communication means comprise an SMS message sending/receiving module (58) for receiving in the form of a message a request for consultation or modification of the said record and to transmit in the form of a message one or more items of information about the said record or an updating

confirmation/invalidation response.

24. System according to Claim 20, comprising an ISDN interface (51), characterised in that the communication means comprise a UUI user to user information sending/receiving module (53), for receiving in the form of a said item of UUI information, a request for consultation or modification of the said record and to transmit in the form of a said item of UUI information one or more items of information about the said record or an updating confirmation/invalidation response.

25. System according to Claim 20, characterised in that it comprises a fax module (59) for transmitting one or more items of information about the said record or an updating confirmation/invalidation response.

26. System according to one of Claims 1 to 19, characterised in that it comprises an IP interface (60).

27. System according to Claim 26, characterised in that the communication means comprise a web server adapted to transmit an authentication form, a form for entering a request for consultation or modification of said record, representing one or more items of information about the said record or an updating confirmation/invalidation response in the form of web pages.

28. System according to Claim 26, characterised in that the communication means comprise an SMTP (Simple Mail Transfer Protocol) server adapted to receive in the form of e-mails a request for consultation or modification of the said record and to transmit in the form of e-mails one or more items of information about the said record and/or an updating confirmation/invalidation response.

29. System according to one of the preceding claims, characterised in that the control means are adapted to determine the said domain name from a subscriber identifier.

30. System according to Claim 29, characterised in that the said subscriber identifier is the E.164 telephone number of the said subscriber.

31. System according to Claim 29 or 30, characterised in that the said control means are adapted to extract information and to determine according to the said request an operation to be performed on a resource record of the NAPTR (Naming Authority PoinTeR) type.

32. System according to one of the preceding claims, characterised in that the said control means are adapted to extract information and to determine according to the said request an operation to be performed on one or more resource records of the A, NS, MD, MF, CNAME, SOA, MB, MG, MR, NULL, WKS, PTR, HINFO, MINFO, MX or TXT type.

Fig. 1

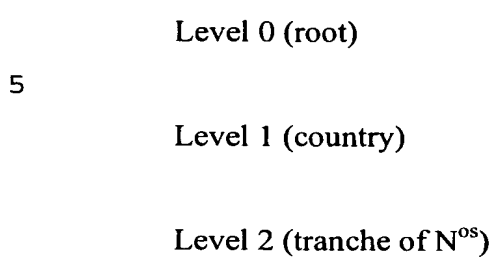

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Fig. 2A

ISDN (10)

5

STN (11)

GSM (12)

Fig. 2B

(10) to (12) see Fig. 2A

40 Domain

31 niv. = level

Fig. 3A

ISDN/STN

5

Fig. 3B

10 ISDN

11 STN

31 niv. = level

Fig. 4

Telephone

52 Calling automatic controller

55 Voice synthesis

73 Authentication

70 Database

75 ENUM script

62 DNS protocol

32 DNS protocol

33 Database

Loop

Fig. 5

See Fig. 4

5

Fig. 6

63 Web server

5

See also Fig. 4

Fig. 7

57 Minitel server

5

See also Fig. 4

Fig. 8

61 e-mail server

See also Fig. 4

Fig. 9

53 UUI

5

See also Figs. 4 and 5

50

Fig. 10

74 Configuration automatic controller

5

See also earlier figures

Fig. 11

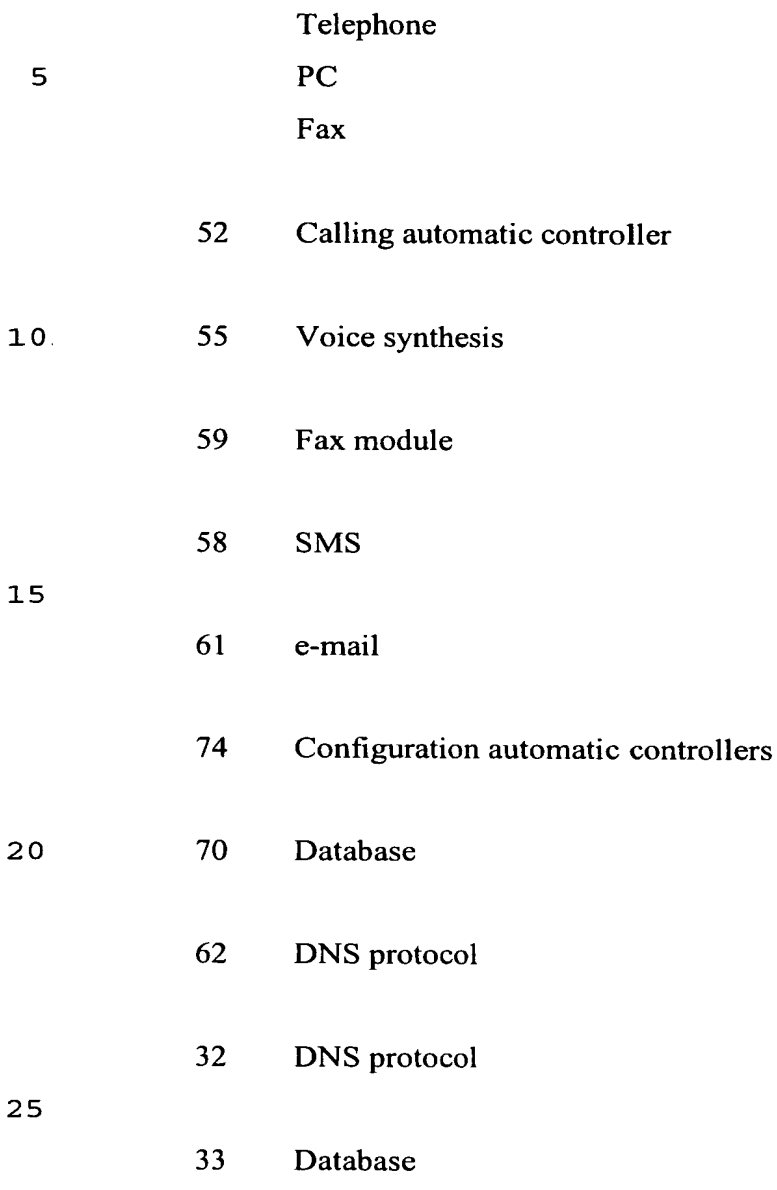
Telephone
PC
Fax
52 Calling automatic controller
55 Voice synthesis
59 Fax module
58 SMS
61 e-mail
74 Configuration automatic controllers
70 Database
62 DNS protocol
32 DNS protocol
33 Database

Fig. 12

64 and 33 LDAP protocol

5

See also earlier figures

Fig. 13

See earlier figures

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